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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Blakesley et al.
Serial No.: 09/903,864
Filed: July 13, 2001
Published: January 31, 2002
Publication No.: US 2002/0012982
Title: Methods and compositions for rapid protein and peptide
extraction and isolation using a lysis matrix

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REQUEST FOR ACCESS TO AN APPLICATION UNDER 37 C.F.R. § 1.14(c)(1)(i)

Dear Sir:

The above-identified published U.S. patent application claims benefit under 35 U.S.C. § 119(e) to the following two provisional applications: (1) Provisional Application Number 60/274,630, filed on March 12, 2001, and (2) Provisional Application Number 60/218,081, filed on July 13, 2000. A copy of the page of U.S. 2002/0012982 showing the benefit claim is attached.

I hereby request a copy of the above two provisional applications as filed under 37 C.F.R. § 1.14(c)(1)(i). Please charge the fee set forth in 37 C.F.R. § 1.19(b)(1) and any other fees required to the Deposit Account No. 17-0055.

Please direct all correspondence and telephone calls regarding this request to the undersigned.

Respectfully submitted,

August 18, 2003

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US 20020012982A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2002/0012982 A1****Blakesley et al.**(43) **Pub. Date: Jan. 31, 2002**

(54) **METHODS AND COMPOSITIONS FOR
RAPID PROTEIN AND PEPTIDE
EXTRACTION AND ISOLATION USING A
LYSIS MATRIX**

Publication Classification(51) **Int. Cl.⁷** **C12N 9/00; C07K 1/14**(52) **U.S. Cl.** **435/183; 530/412**

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(73) **Assignee: Invitrogen Corporation**(21) **Appl. No.: 09/903,864**(22) **Filed: Jul. 13, 2001****Related U.S. Application Data**

(63) **Non-provisional of provisional application No.
60/274,630, filed on Mar. 12, 2001. Non-provisional
of provisional application No. 60/218,081, filed on
Jul. 13, 2000.**

(57) **ABSTRACT**

The present invention relates generally to compositions, methods and kits for use in extracting and isolating protein or peptide molecules. More specifically, the invention relates to such compositions, methods and kits that are useful in the isolation of protein or peptide molecules from cells (e.g., bacterial cells, animal cells, fungal cells, viruses, yeast cells or plant cells) via lysis and one or more additional isolation procedures, such as one or more filtration and/or chromatography procedures. In particular, the invention relates to compositions, methods and kits wherein protein or peptide molecules are isolated using an integrated lysis/filtration matrix, which may comprise one or more supports (e.g., polyolefin, scintered polyethylene, nitrocellulose, polypropylene, polycarbonate, cellulose acetate, silica, and the like). The compositions, methods and kits of the invention are suitable for isolating a variety of forms of protein or peptide molecules from cells. The compositions, methods and kits of the invention are particularly well-suited for rapid isolation of recombinant protein or peptide molecules expressed in bacterial cells, either as soluble protein, or as an inclusion body. The invention is particularly useful in high throughput applications, allowing quick isolation and/or analysis of proteins and/or peptides from numerous sources.